Claims

1. A rotary conveyor comprising:

a drum-shaped shell having openings;

an eccentric axle arranged inside the shell, the eccentric axle defining an axial direction;

finger supports being rotatively mounted to the eccentric axle by bearings, the finger supports extend radially outward from and parallel to the eccentric axle;

a plurality of fingers are mounted to each finger support, the fingers extending through the openings in the drum-shaped shell such that fingers on one finger support are arranged next to one another in the axial direction, the finger supports are distributed around the circumference of the eccentric axle.

2. A rotary conveyor as defined by claim 1 wherein that portion of the shell having fingers is provided with three finger supports that are distributed along the eccentric axle.

3. A rotary conveyor as defined by claim 1 wherein the finger supports are offset relative to one another in the axial direction.

4. A rotary conveyor as defined by claim 3 wherein the finger supports are identical to one another.

5. A rotary conveyor as defined by claim 4 wherein each finger support is mounted on the eccentric axle by several annular bearings spaced apart in the axial direction along the eccentric axle.

6. A rotary conveyor as defined by claim 5 wherein the finger supports extend over that portion of the drum-shaped shell having openings for the fingers.

7. A rotary conveyor as defined by claim 6 wherein the fingers are removably attached to the finger supports.

8. A rotary conveyor as defined by claim 7 wherein the fingers are screwed into threaded openings in the finger supports.

9. A rotary conveyor as defined by claim 8 wherein the fingers are secured on the finger supports by locking nuts.

10. A rotary conveyor comprising:

a rotatable drum-shaped shell having openings;

a non-rotating eccentric axle arranged inside the shell, the non-rotating eccentric axle defining an axial direction;

finger supports being rotatively mounted to the non-rotating eccentric axle by bearings, the finger supports extend radially outward from and parallel to the non-rotating eccentric axle;

a plurality of fingers are mounted to each finger support, the fingers extending through the openings in the drum-shaped shell such that fingers on one finger support are arranged next to one another in the axial direction.

~~11. A rotary conveyor as defined by claim 10 wherein each finger support is mounted to the non-rotating eccentric axle by at least two annular bearings.~~

~~12. A rotary conveyor as defined by claim 11 wherein the finger supports are offset relative to one another in the axial direction.~~

13. A rotary conveyor as defined by claim 12 wherein the finger supports are identical to one another.

14. A rotary conveyor as defined by claim 10 wherein the fingers are removably attached to the finger supports.

15. A rotary conveyor as defined by claim 14 wherein the fingers are screwed into threaded openings in the finger supports.

16. A rotary conveyor as defined by claim 15 wherein the fingers are secured on the finger supports by locking nuts.

~~17. A rotary conveyor comprising:~~

a rotatable shell having openings;

a non-rotating eccentric axle arranged inside the shell;

finger supports being rotatively mounted to the non-rotating eccentric axle by bearings, the finger supports extend radially outward from and parallel to the non-rotating eccentric axle, the finger supports being located inside the rotatable shell;

a plurality of fingers are mounted to each finger support, the fingers extending through the openings in the shell.